

REMARKS

Claims 1, 11, and 14 stand rejected under 35 USC §112, second paragraph, and claim 3 is objected to. Claims 1, 5, 6, 8, 11-15, 17 and 18 stand rejected under 35 USC §102(b) as being anticipated by Brownbridge et al., Oracle Discoverer 4i Plus. Claims 3 and 4 stand rejected under 35 USC §103(a) as being unpatentable over Brownbridge in view of Ramasamy et al., U.S. patent 6,944,614. Claim 7 stands rejected under 35 USC §103(a) as being unpatentable over Brownbridge in view of Rankins et al., Microsoft SQL Server 2000 unleashed, Second Edition.

Claims 1, 3, 4, 11, and 14 have been amended to more clearly state the invention and to clearly distinguish over the references of record. Claim 13 has been canceled. As amended, each of the independent claims 1, 11, and 14 is believed to accommodate the Examiner's rejection under 35 USC §112, second paragraph, and more clearly define the invention. Reconsideration of independent claims 1, 11, and 14, as amended, and withdrawal of the rejection under 35 USC §112, second paragraph is respectfully requested.

As amended, each of the independent claims 1, 11, and 14 is believed to clearly distinguish over the references of record including Brownbridge et al., Oracle Discoverer 4i Plus. Reconsideration and allowance of each of the pending claims 1, 3-8, 11-12, 14-15, and 17-18, as amended, is respectfully requested.

Brownbridge et al., Oracle Discoverer 4i Plus discloses a program including at pages 9 and 10, options for Query Governor Data including a warning if

predicted query time exceeds a set time, and to prevent a query from running longer than a set time. At page 16-17, automatic querying is described.

Ramasamy et al., U.S. patent 6,944,614 discloses a method, apparatus, article of manufacture, and a memory structure for monitoring an executed query comprising at least one execution thread. The method comprises the steps of executing the query; and while executing the query, storing an execution trace record for each execution thread in at least one execution log file. The execution trace record comprises execution trace information including a thread ID and a time stamp for the execution thread. The execution trace information can be recalled from the execution log file and presented to a user after execution of the query to allow post mortem analysis of the query. The apparatus comprises a data server for executing the execution thread and for storing an execution trace record for the executed execution thread, the execution trace record having execution trace information including a thread identifier and a time stamp; a query coordinator for storing an execution plan having a time stamp and for retrieving and synchronizing the execution trace record and the execution plan; and a client process for displaying the retrieved execution trace information to a user after execution of the query. FIGS. 3A-3C present an example of an SQL query, an associated tree of rational operators, and an associated access plan. FIG. 6 shows an example of an operator tree corresponding to the query shown in FIG. 3A. FIG. 7 presents an example of the operator tree depicted in FIG. 6 illustrating the associated tree descriptors.

Rankins et al., Microsoft SQL Server 2000 unleashed, Second Edition,

discloses features of the Microsoft SQL Server 2000 product, and describes returning procedure status starting at page 16 and provides a table of SQL server return codes at pages 17-18.

Reconsideration and allowance of each of the pending claims 1, 3-8, 11-15, and 17-18, as amended, is respectfully requested.

The present invention enables the database user to be allowed to modify multiple query attributes including multiple executing components of a query. A query can be broken down into multiple query execution components, for example, data retrieval, trigger processing, and user defined function (UDF) processing, and with each of these query execution components having an individual time out value. Execution of the query is halted responsive to an expired time out value for the query, the requested monitor including at least one of a user defined function (UDF) and a trigger.

As amended, each of the independent claims 1, 11 and 14 is believed to more clearly define the invention and to be patentable over the records of record including Brownbridge.

Independent claim 1, as amended, recites a method for implementing enhanced query governor functions. Independent claim 1, as amended, recites checking for a timeout value for the query and checking for a timeout value of the requested monitor including at least one of said user defined function (UDF) and said trigger; responsive to identifying a timeout value for the query, resetting an execution time for the query; starting a monitor for an identified timeout value for the query and starting a monitor for an identified timeout value of the requested monitor including said at least one of said

user defined function (UDF) and said trigger; starting the execution of the query; monitoring the execution of predefined events during the execution of the query; said predefined events including a begin or end of processing of said requested monitor including at least one of said trigger and said user defined function (UDF); periodically checking execution status of the query; responsive to identifying the query is executing, checking for an expired timeout value for the query and for the requested monitor including at least one of said user defined function (UDF) and said trigger; and halting the execution of the query responsive to an identified expired timeout value.

Applicants submit that as amended, independent claim 1 is patentable over the references of record including Brownbridge.

Independent claim 1, as amended, now more clearly recites features of the invention, including checking for an expired timeout value for the query and for the requested monitor including at least one of said user defined function (UDF) and said trigger; and halting the execution of the query responsive to an identified expired timeout value. These limitations as recited in independent claim 1, as amended, are not disclosed or suggested by the teachings of Brownbridge.

Thus, independent claim 1, as amended, is patentable.

Independent claim 11, as amended, recites apparatus for implementing enhanced query governor functions. The claimed SQL processor program for monitoring events, and said SQL processor program responsive to an event to modify attributes, performing a modify attributes routine; and responsive to an event to execute query, performing an execute query routine; said modify attributes routine including the

steps responsive to a monitor being requested, setting a timeout for the requested monitor; the requested monitor including at least one of a user defined function (UDF) monitor and a trigger monitor is not disclosed or suggested in the prior art. Further the query governor program including said at least one of said user defined function (UDF) monitor and said trigger monitor; said UDF monitor and said trigger monitor monitoring the execution of predefined events during the execution of the query; said predefined events including a begin or end of processing of said at least one of said trigger monitor and said UDF monitor is not disclosed or suggested in the prior art.

Independent claim 11, as amended, recites responsive to said event to execute query performing said execute query routine includes the steps of identifying an expired timeout value for said trigger or said UDF, halting the execution of the query. For prior art to anticipate under §102 it has to meet every element of the claimed invention; independent claim 11, as amended, clearly distinguishes over Brownbridge.

Anticipation under § 102 can be found only when the reference discloses exactly what is claimed; where there are differences between the reference disclosure and the claim, the rejection must be based on § 103 which takes differences into account. Tyler Refrigeration v. Kysor Industrial Corp., 777 F.2d 687, 689, 227 U.S.P.Q. 845 846-47 (Fed. Cir. 1985). It must be shown that the reference contains all of the elements of the claims, and that the elements are arranged in the same way to achieve the same result which is asserted to be an inventive function. The reference of record including Brownbridge do not teach, enable, or suggest a query governor program including a SQL processor program as now recited in independent claim 11, as

amended.

Thus, independent claim 11, as amended, is patentable.

Independent claim 14, as amended, recites a computer program product for implementing enhanced query governor functions in a computer system.

Independent claim 14, as amended, is patentable for the same reasons as independent claims 1 and 11, as amended. Independent claim 14, as amended, recites monitoring events, responsive to an event to modify attributes, performing a modify attributes routine; said modify attributes routine including checking for a monitor being requested; and responsive to a monitor being requested, setting a timeout value for the requested monitor; the requested monitor including at least one of a user defined function (UDF) and a trigger; responsive to identifying an execute query event, performing an execute query routine; said execute query routine including: checking for a timeout value for the query and checking for a timeout value of the requested monitor including said at least one of said user defined function (UDF) and said trigger, responsive to identifying a timeout value for the query, resetting an execution time for the query; starting a monitor for an identified timeout value for the query and starting a monitor for an identified timeout value for the requested monitor including said at least one of said user defined function (UDF) and said trigger; starting the execution of the query; monitoring the execution of predefined events during the execution of the query; said predefined events including a begin or end of processing of the requested monitor including said at least one of said trigger and said user defined function (UDF); periodically checking execution status of the query; responsive to identifying the query is executing, checking

for-an expired timeout value for the query and for said requested monitor including at least one of said user defined function (UDF) and said trigger; and halting the execution of the query responsive to an identified expired timeout value.

Independent claim 14, as amended, is patentable for the same reasons as independent claim 1. None of the cited references including Brownbridge suggest starting a monitor for an identified timeout value for the query and starting a monitor for an identified timeout value for the requested monitor including said at least one of said user defined function (UDF) and said trigger, and halting the execution of the query responsive to an identified expired timeout value. These limitations as recited in independent claim 14, as amended, are not disclosed or suggested by Brownbridge.

Thus, independent claim 14, as amended, is patentable.

Dependent claims 3-8, 12, 15, and 17-18 respectively depend from patentable claims 1, 11, and 14, further defining the invention. Each of the dependent claims 3-8, 12, 15, and 17-18, as amended, is likewise patentable.

Applicants have reviewed all the art of record, and respectfully submit that the claimed invention is patentable over all the art of record, including the references not relied upon by the Examiner for the rejection of the pending claims.

It is believed that the present application is now in condition for allowance and allowance of each of the pending claims 1, 3-8, 11-12, 14-15, and 17-18, as amended, is respectfully requested. Prompt and favorable reconsideration is respectfully requested.

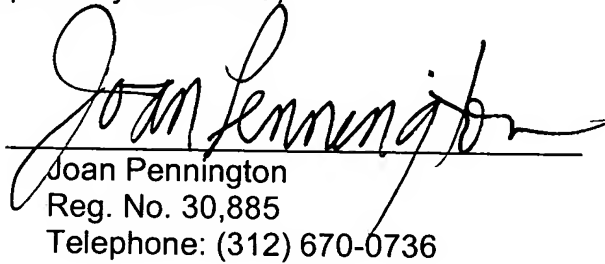
If the Examiner upon considering this amendment should find that a

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telephone interview would be helpful in expediting allowance of the present application, the Examiner is respectfully urged to call the applicants' attorney at the number listed below.

Respectfully submitted,

By:


Joan Pennington
Reg. No. 30,885
Telephone: (312) 670-0736